NOV 1 0 2004 P.

(p1731 /

PTO/SB/21 (04-04)

	Evaminer Name	Hoffmann John M	
(to be used for all correspondence after initial filing)	Art Unit	1731	
FORM	First Named Inventor	M'Saad, Hichem	
TRANSMITTAL	Filing Date	December 14, 2001	
9	Application Number	10/020,461	

Tota	al Number of F	Pages in Th	is Submission		Attorney Docket I	No	A61	23/T437	00		,	
				ENG	CLOSURES	(Check all that a	apply)					
	Amendmen Aft Aft Extension Express Al	e Attache nt/Reply ter Final fidavits/de of Time R	eclaration(s) dequest ent Request		Drawing(s) Licensing-related Petition Petition to Conve Provisional Applie Power of Attorne Change of Correct Terminal Disclain Request for Refu	rt to a cation y, Revocation spondence Addre		A A Of	o Technolo ppeal Corr f Appeals a ppeal Corr Appeal Notic roprietary status Lette Other Enclo dentify belo costcard, c	gy Cen nmunica and Inte nmunica ce, Brief Informa er esure(s) ow):	ation to Boa erferences ation to TC f, Reply Brie ation	ord
Information Disclosure Statement Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53			Rema		mmissioner is au 20-1430.	— Ithoriz	ed to char	rge any ac	dditiona	al fees to D	eposit	
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Firm or			end and Towns	send an	d Crew LLP							
	ual name	Patrick	M. Boucher			Reg.	No. 4	14,037				
Signati	ure	Ka	tali Ten			,		- <u>-</u> -				
Date		4	204 November	er 8								
			. C	ERTIFI	CATE OF TRA	NSMISSION	/MAII	LING	•			
I herei	by certify that ope address	at this corr ed to: Cor	respondence is be mmissioner for Pa	ing depo tents, P.(sited with the Unit D. Box 1450, Alexa	ed States Postal 3 andria, VA 22313-	Service 1450 d	e with suffi on the date	cient posta shown be	age as telow.	first class m	iail in an
Typed	or printed n	iame	Nicole Wartell	_								
Signat	ture		Jil	La VK	Oltho			· · ·	Date	n/c	08/20	od)

NOV 1 0 2004 33

FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 180

Complete if Known					
Application Number	10/020,461				
Filing Date	December 14, 2001				
First Named Inventor	M'Saad, Hichem				
Examiner Name	Hoffmann, John M.				
Art Unit .	1731				
Attorney Docket No.	A6123/T43700				

METHOD OF PAYMENT (check all that apply)					FEE CALCULATION (continued)					
Check Credit Card Money Order Other None					DITION	AL FE	ES			
Deposit Acc	ount:			Large	Entity	Small	Entity			
Deposit Account	20-143	30		Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid	
Number				1051	130	2051	65	Surcharge - late filing fee or oath		
Deposit	-			1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.		
Account Name	Townsen	d and Townsend and C	rew LLP	1053	130	1053	130	Non-English specification		
The Director is		(check all that apply)		1812	2,520	1812	2,520	For filing a request for ex parte reexamination		
	s) indicated belo additional fee(s)	w Credit any overpay or any underpayment of fee		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		
Charge fee(• •	w, except for the filing fee	(-)	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		
to the above-lue	•	CALCULATION		1251	110	2251	55	Extension for reply within first month		
		CALCULATION		1252	430	2252	215	Extension for reply within second month		
	ILING FEE			1,050	000	2050	400	Code and a construction ships and and about	\vdash	
	Small Entity	-		1253	980	2253	490	Extension for reply within third month	<u> </u>	
Fee Fee Code (\$)	Fee Fee Code (\$)	Fee Description	Fee Paid	1254	1,530	2254	765	Extension for reply within fourth month		
	2001 395	Utility filing fee		1255	2,080	2255	1,040	Extension for reply within fifth month		
1002 350	2002 175	Design filing fee		1401	340	2401	170	Notice of Appeal		
1003 550	2003 275	Plant filing fee		1402	340	2402	170	Filing a brief in support of an appeal		
	2004 395	Reissue filing fee		1403	300	2403	150	Request for oral hearing		
1005 160	2005 80	Provisional filing fee		1451	1,510	1451	1,510	Petition to institute a public use proceeding		
1	SUBTO	TAL (1)	(\$)	1452	110	2452	55	Petition to revive – unavoidable		
2. EXTRA C	LAIM FEES	FOR UTILITY AND RE	ISSUE	1453	1,330	2453	665	Petition to revive – unintentional		
		Fee from		1501	1,370	2501	685	Utility issue fee (or reissue)		
_	E	tra Claims below	Fee Paid	1502	490	2502	245	Design issue fee		
Total Claims	-" =	X	-	1503	660	2503	330	Plant issue fee		
Independent	=		1 ===	1460	130	1460	130	Petitions to the Commissioner		
Claims	-** =	M	=	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)		
Multiple Dependent		×]= [1806	180	1806	180	Submission of Information Disclosure Stmt	180	
Large Entity	Small Entity			8021	40	8021	40	Recording each patent assignment per property (times number of properties)		
Fee Fee Code (\$)	Fee Fe Code (\$)			1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))		
1202 18 1201 88	2202 2201 4	9 Claims in excess 4 Independent clair		1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))		
1203 300	2203 15	0 Multiple depende	nt claim, if not paid	1801	790	2801	395	Request for Continued Examination (RCE)		
1204 88	2204 4	over original pa	atent	1802	900	1802	900	Request for expedited examination of a design application		
1205 18	i	and over origin		Other fe	ee (specify)				
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SUBMITTED BY			Complete (if applicable)		
Name (Print/Type)	ame (Print/Type) Patrick M. Boucher Registration No. (Attorney/Agent) 44,037 Telephone 303-571-4000				303-571-4000
Signature	Signature Patali Re			Date	2004 November 8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Attorney Docket No.: A6123/T43700

AMAT No.: : 006123/DD/HDP/JW

TTC Reference No. 016301-043700US

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

TOWNSEND and TOWNSEND and CREW LLP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

HICHEM M'SAAD et al.

Application No.: 10/020,461

Filed: December 14, 2001

For: METHOD OF MANUFACTURING

AN OPTICAL CORE

Examiner: Hoffmann, John M.

Art Unit: 1731

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37

CFR §1.97 and §1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Page 2

Applicant is resubmitting the foreign and non-patent literature references listed on forms PTO/SB/08A and PTO/SB/08B in order to correct any deficiency from previous submissions. The following translations of the abstracts of the foreign references are provided, and constitute the entire understanding of the relevance of the references as understood by the undersigned. No English translation of the entire references is known to be available to any individual specified in 37 C.F.R. §1.56(c).

1. EP 0 659 902

Plasma-assisted CVD of a silica thin film on a substrate involves: (a) introducing oxygen and opt. argon into a vacuum chamber, igniting the plasma and then introducing silane; and (b) carrying out the process under the conditions of 40-80 (pref. 60) microbars gas pressure in the chamber, 0-35 (pref. 10) cu.cm/min. argon supply rate, 12-24 (pref. 12) cu.cm/min. silane supply rate, 13-38 (pref. 26-38) cu.cm/min. oxygen supply rate, 200-300 (pref. 200) deg. C substrate temp. and 750-1100 (pref. 1100) W plasma reactor power. Phosphine may also be introduced into the chamber to dope the silica thin film.

Also claimed in an appts. for carrying out silica thin film CVD.

USE - E.g. in the production of a planar optical waveguide on a silicon substrate or in the mfg. of a flat LCD screen

ADVANTAGE - The process allows deposition of silica containing very little hydrogen (10-100 ppm) at close to 200 deg. C and produces 0.1-10 microns thick deposits in a few minutes.

2. EP 0 735 160

In a process for CVD of a silica thin film, for an integrated optical waveguide, from O2 and SiCl4 with microwave-generated plasma assistance, the novelty is that: (a) the substrate temp. is maintained at 200-800 (pref. 500-600) deg.C; (b) the CVD chamber pressure is maintained at 1-20 Pa; and (c) the SiCl4-contg. reactive gas is injected between the plasma and the substrate within the chamber. Pref. the plasma is created from O2 and the ractive gas also

Page 3

contains a carrier gas and opt. one or more dopants such as GeCl4, C2F6, POCl3 and/or BCl3.

Also claimed are: (i) a CVD appts. for carrying out the above process; and (ii) an integrated

optical waveguide mfg. method including the above process.

ADVANTAGE - The process produces a thin film with improved thickness and

optical index uniformity, while maintaining high deposition rate, a reduced number of process

steps and a low process tem. (< 800 deg. C). Additionally, the thin film has acceptable optical

attenuation at 1.55 and 1.3 mum, without the need for a supplementary annealing step.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the

information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses

all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or

Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please

deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Patrick M. Boucher

Potale se

Reg. No. 44,037

TOWNSEND and TOWNSEND and CREW LLP

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San Francisco, California 94111-3834

Tel: 303-571-4000

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PMB:nmb

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PTO/SB/08A (08-03)

ubstitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known							
Application Number	10/020,461						
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First Named Inventor	M'Saad, Hichem						
Art Unit	1731						
Examiner Name	Hoffmann, John M.						
Attorney Docket Number	A6123/T43700						

	U.S. PATENT DOCUMENTS+							
		Document Number						
Examiner Initials*	Cite No. ¹	Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	A1	US-6,080,683	06-27-2000	Faur et al.				
	A2	US-6,204,200 B1	03-20-2001	Shieh et al.				
	A3							
	A4 .							
	A5				1 20 200 200			

	FOREIGN PATENT DOCUMENTS								
Examiner Cite Initials* No.1	Cite Foreign Patent Docu			ument	Dublication Data	Name of Patentee or	Pages, Columns, Lines, Where Relevant		
		Country Code ³	Number⁴	Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶	
	B1	EPO	EP 0 659 902	A1	06-28-1995				
	B2	EPO	EP 0 735 160	B1	08-30-2000				
	B3								

Examiner Signature	Date Considered	



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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

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Application Number	10/020,461				
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First Named Inventor	M'Saad, Hichem				
Art Unit	1731				
Examiner Name	Hoffmann, John M.				
Attorney Docket Number	A6123/T43700				

	NON PATENT LITERATURE DOCUMENTS								
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²						
	C1	MATTHEWS, MANYALIBO J. et al. "Characterization of phosphosilicate thin films using confocal Raman microscopy" Review of Scientific Instruments, May 2000, pp. 2117-2120, Vol. 71, No. 5, American Institute of Physics.							
	C2	VALETTE, S. et al. "Si-Based Integrated Optics Technologies" Solid State Technology, February 1989, pp. 69-75.							
	СЗ	VALETTE, S. et al. "State of the art of integrated optics technology at LETI for achieving passive optical components" Journal of Modern Optics, 1988, pp. 993-1005, Vol. 35, No. 6.							

Examiner		Date	
Signature		Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.